# **RULE 229 FIBERBOARD MANUFACTURING**

Adopted 06-28-94

# **CONTENTS**

101 APPLICABILITY

## 200 DEFINITIONS

201 FIBER DRYER

202 FIBERBOARD PRESS

203 MEDIUM DENSITY FIBERBOARD PLANT

204 PRESS LINE

205 PRESS VENT

206 VOLATILE ORGANIC COMPOUND (VOC)

# 300 STANDARDS

301 LIMITATIONS

## 400 ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE

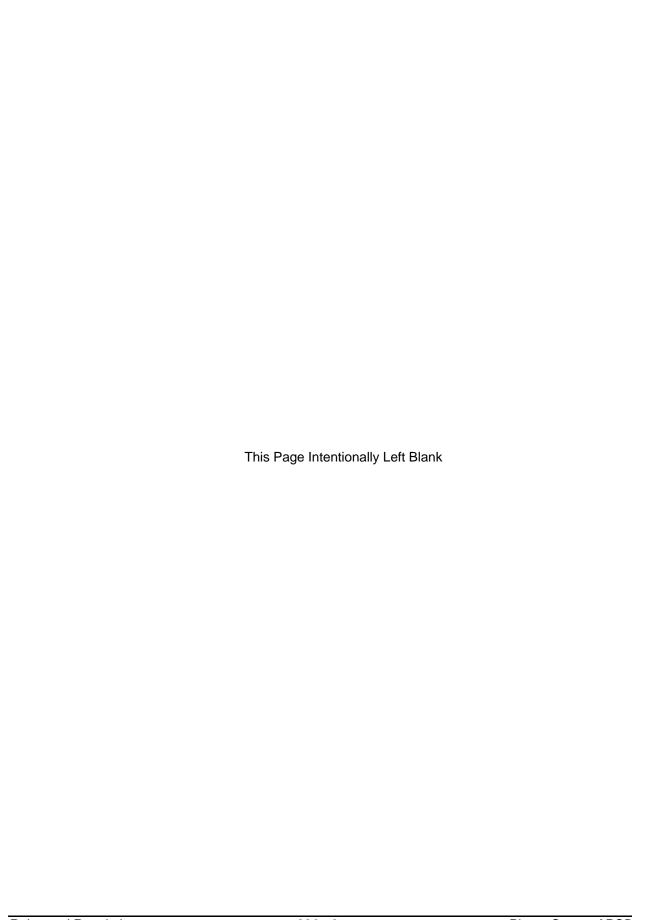
402 OPERATION AND MAINTENANCE PLAN

# 500 MONITORING AND RECORDS

501 CONTROL EQUIPMENT RECORDS

502 DURATION OF RECORDS

503 TEST METHODS FOR CAPTURE AND CONTROL EFFICIENCY



## 100 GENERAL

**101 APPLICABILITY:** The provisions of this rule shall apply to Medium Density Fiberboard (MDF) plants.

#### 200 DEFINITIONS

- **201 FIBER DRYER:** A device that uses steam-generated heat to reduce the moisture content of wood fibers.
- **202 FIBERBOARD PRESS:** A device that uses heat and pressure to form fiberboard from a preformed mat of wood fiber and resin.
- **203 MEDIUM DENSITY FIBERBOARD PLANT:** A plant that manufactures medium density fiberboard consisting of a composite wood product created from digested and refined wood fibers bonded with urea-formaldehyde resin.
- **204 PRESS LINE:** A series of operations occurring within the press building including mat forming, fiberboard pressing, board unloading, and board cooling.
- **205 PRESS VENT:** A building opening through which emissions from fiberboard press lines are exhausted from the press line building.
- **206 VOLATILE ORGANIC COMPOUND (VOC):** Any compound that contains at least one atom of carbon, except:

| or carbon, ca | Coopt.                                                      |
|---------------|-------------------------------------------------------------|
| 206.1         | Methane                                                     |
| 206.2         | Carbon dioxide                                              |
| 206.3         | Carbon monoxide                                             |
| 206.4         | Carbonic acid                                               |
| 206.5         | Metallic carbides or carbonates                             |
| 206.6         | Ammonium carbonate                                          |
| 206.7         | 1,1,1-trichloroethane                                       |
| 206.8         | Methylene chloride                                          |
| 206.9         | 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123)               |
| 206.10        | 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)               |
| 206.11        | Trichlorofluoromethane (CFC-11)                             |
| 206.12        | Dichlorodifluoromethane (CFC-12)                            |
| 206.13        | 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113)             |
| 206.14        | 1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane (CFC-114) |
| 206.15        | Chloropentafluoroethane (CFC-115)                           |
| 206.16        | Pentafluoroethane (HFC-125)                                 |
| 206.17        | 1,1,2,2-tetrafluoroethane (HFC-134)                         |
| 206.18        | Tetrafluoroethane (HFC-134a)                                |
| 206.19        | 1,1-dichloro-1-fluoroethane (HCFC-141b)                     |
| 206.20        | 1-chloro-1,1-difluoroethane (HCFC-142b)                     |
| 206.21        | 1,1,1-trifluoroethane (HFC-143a)                            |
| 206.22        | Chlorodifluoromethane (HCFC-22)                             |
| 206.23        | Trifluoromethane (HFC-23)                                   |
| 206.24        | Difluoroethane (HFC-152a)                                   |
| 206.25        | The following four classes of perfluorocarbon compounds:    |

- a. Cyclic, branched, or linear, completely fluorinated alkanes.
- b. Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations.
- c. Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations.

d. Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

Perfluorocarbon compounds will be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the product or process and provides a validated test method which can be used to quantify the specific compounds.

#### 300 STANDARDS

- **301 LIMITATIONS:** Any person operating an affected MDF plant shall meet the following VOC emission limits:
  - 301.1 Wood Fiber Dryers: A capture and control system shall be in operation to reduce VOC emissions from wood fiber dryers. The capture and control system shall be maintained and operated at all times during the operation of the wood fiber dryers. The overall efficiency of the system (capture efficiency multiplied by control efficiency) shall not be less than 50% by weight in reducing VOC emissions.
  - 301.2 <u>Press Vents:</u> A capture and control system shall be in operation to reduce VOC emissions from press vents. The capture and control system shall be maintained and operated at all times during the operation of the press vents. The overall efficiency of the system (capture efficiency multiplied by control efficiency) shall not be less than 57% by weight in reducing VOC emissions.
  - 301.3 <u>Maximum Achieved Reduction Limitation:</u> In the event that the overall efficiency of the control systems for the Wood Fiber Dryers and/or the Press Vents result in actual efficiencies equal to or greater than the minimum required efficiencies of Section 301.1 or Section 301.2 for the Wood Fiber Dryers and the Press Vents, respectively, the required emission limitation shall be equal to the highest overall control system efficiency demonstrated.
  - 301.4 <u>Allowable Emission Rate:</u> The VOC emission limits satisfying the requirements of Sections 301.1, 301.2, or 301.3, shall be incorporated into the permit to operate of the stationary source and shall be a limiting condition of operation. The emission limitation represented by the application of the overall control system efficiency to the source emissions at the maximum permitted process rate may be expressed in the permit to operate as an emission rate or emission concentration limit.

## 400 ADMINISTRATIVE REQUIREMENTS

- **401 COMPLIANCE SCHEDULE:** The limits specified in Sections 301.1 and 301.2 shall be achieved on or before May 31, 1995.
- **402 OPERATION AND MAINTENANCE PLAN:** A person shall submit an Operation and Maintenance Plan for the emission control device with the application for Authority to Construct or by May 31, 1995, for existing facilities permitted by the District prior to June 28, 1994.
  - 402.1 The Operation and Maintenance Plan shall specify:
    - Operation and maintenance procedures that will demonstrate continuous operation of the emission control device during emission-producing operations; and

- b. Records that must be kept to document the operation and maintenance procedures.
- 402.2 The records must comply with Sections 501 and 502.
- 402.3 The Operation and Maintenance Plan shall be implemented upon approval by the Air Pollution Control Officer.
- 402.4 After completing the construction of the emission control device, the Operation and Maintenance Plan shall be resubmitted annually, or as otherwise requested by the Air Pollution Control Officer, for approval.

# 500 MONITORING AND RECORDS

#### 501 CONTROL EQUIPMENT RECORDS:

- 501.1 Any person using an emission control device shall maintain such records as required by the Operation and Maintenance Plan specified in Section 402 on a daily basis.
- 501.2 Compliance with the standards of Sections 301.1 and 301.2 shall be demonstrated by conducting annual source testing of the emission control equipment as specified in Section 503.
- 501.3 An annual certification of compliance shall be submitted to the Air Pollution Control Officer on or before February 1 of each year. The certification of compliance shall include:
  - A declaration that the facility is in compliance with all applicable requirements of this rule.
  - b. The results of any compliance testing performed during the previous year.
  - c. A description of any process upsets that occurred during the previous year that resulted in noncompliance with an emission limit or proper combustion conditions.
- **502 DURATION OF RECORDS:** All records maintained pursuant to this rule shall be retained for at least two years from the date of entry, with the exception that sources subject to the requirements of Rule 507, FEDERAL OPERATING PERMIT PROGRAM, shall retain records at least five years. Records shall be made available for inspection by the Air Pollution Control Officer upon request.

## 503 TEST METHODS FOR CAPTURE AND CONTROL EFFICIENCY:

- 503.1 Capture efficiency of the emission control system, as specified in Sections 301.1 and 301.2, shall be conducted and reported in accordance with U.S. EPA protocols referenced in 50 CFR 52.741(a)(4)(iii).
- 503.2 Control efficiency, as specified in Sections 301.1 and 301.2, shall be determined by U.S. EPA Reference Methods 25 or 25A as found in 40 CFR Part 60, Appendix A.

